

# A Descriptive Study to Assess the Knowledge on Waterborne Diseases Among Young Adult at Selected Rural Area

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**Abstract: Aim and Objective:** To assess the level of knowledge about the water borne disease among young adults at selected rural area. **Methodology:** Non experimental descriptive research design was adopted for this study, the 100 samples was selected using the non-randomized purposive sampling technique, the tool consist of two parts, section A –demographic variable, and section B -self structured questionnaire was used to assess the level of knowledge. **Results:** The study reveals 65% of people have inadequate knowledge, 15% of people have moderate knowledge, and 20% of people have adequate knowledge. The findings suggested that there was a significant association between the level of knowledge with their selected demographic variables such as age of samples, gender, religion, education, occupation, marital status, types of family, dietary pattern. **Conclusion:** The study reveals the 65% (majority) of people having inadequate knowledge regarding the water borne disease.

**Keywords:** knowledge, waterborne diseases, young adult.

## 1. Introduction

Life is dependent on basic elements like water. But the same natural elements also convey death for almost all organisms on earth which are reflected as water borne diseases. Human being is highly susceptible to such infections where an array and water borne diseases are being encountered by us almost on a regular basis.[1] Water borne diseases are initiated by pathogenic microorganisms that most generally are transmitted in polluted crisp water. Tainting generally comes about throughout showering, washing, drinking in the arrangement of substance, or the utilization of nourishment in this manner spoiled. [2] According to World Health Organization, such sickness represents an expected 4.1% of the aggregate worldwide load of health disorder leading to the death of 1.8million human yearly. [3] The World Health Organization gauges that 88% of that trouble is attributable to hazardous water supply, sanitation and hygiene. The expression 'waterborne diseases' is held generally for contamination that dominatingly are transmitted through contact with or utilization of contaminated water. [4] According to the World Health Organization, waterborne diseases account for an estimated 3.6% of the total DALY (Disability Adjusted Life Year) global burden of disease, and cause about 1.5million human deaths annually. The World Health Organization estimates that 58% of

that burden, or 842,000 deaths per year, is attributable to a lack of safe drinking water supply, sanitation and hygiene. [5]

## 2. Methods and Materials

The quantitative approach with non-experimental descriptive research design was used adopted for the present study. After obtaining a ethical clearance from the institutional Ethical Committee (IEC) of Saveetha Institute of Medical And Technical Sciences and a formal permission from the departmental head of Unit, the study was conducted. A total of 100 young adults (n=100) on the rural area thirumazhsai who met the inclusion criteria were selected as study participants by using non probability purposive sampling technique. The inclusion criteria for the study participants are all houses having a open drainage and peoples who are affected in water borne diseases, who are available during the study period who were willing to participate and are able to read, write and understand Tamil and English. The exclusion criteria for the study participants were Community people who are not willing to participate and people who are suffering from water borne diseases. (Diarrhea, typhoid, hepatitis A). The purpose of the study was explained by the investigator to each of the study participant and a written informed consent was obtained from them. The demographic data and the existing level of knowledge was collected by using a self-structured interview questionnaire and the collected data were tabulated and analyzed by using descriptive and inferential statistics.

## 3. Results and Discussion

### A. Section A: Demographic Characteristics

Among 100 study participants, with regards to age 58 (58%) samples comes under the age group of 20 –25 years, With regards to gender 64 (64%)samples comes under male, With regards to educational qualification, 61 (61%) were belongs to primary education (1-8th std), With regards to occupation,45 (45%) were technical worker with regards to the type of family, sample 74(74%) were belongs to nuclear family, With regards to the marriage sample 67 (67%) were married and With regards to dietary pattern 62 (62%) were taking mixed diet.

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**B. Section B: Existing Level of Knowledge on water borne diseases among young adults**

The existing level of knowledge on water borne diseases among young adults residing at thirumazhsai revealed that 65(65%) of people have inadequate knowledge, 15 (15%) of people have moderate knowledge and 20(20%) of people have adequate knowledge. (Table 1 and Figure 1).

Table 1

Frequency and percentage distribution of level of knowledge on water borne disease among young adults

Existing Level of Knowledge	Frequency (NOS)	Percentage (%)
Inadequate knowledge	65	65%
Moderate knowledge	15	15%
Adequate knowledge	20	20%

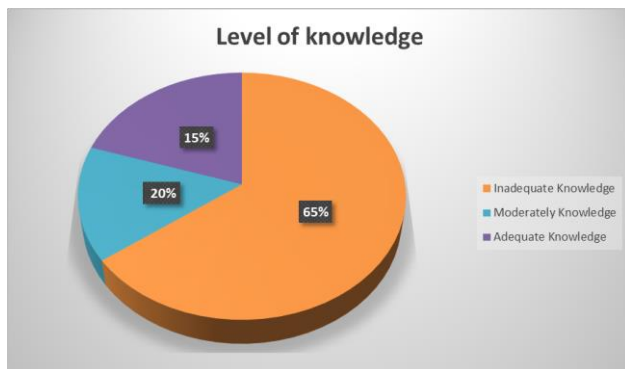


Fig. 1. Percentage distribution on level of knowledge on water borne disease among young adults

The present study findings are supported by Varalakshmi. E. et. al (2020) conducted a study to assess the level of knowledge on water borne diseases among mothers of under five children. The study results determined that there is significant association between the level of knowledge with their selected demographic variables such as age of education and occupation

Hence, it was concluded that, there is a need to educate and improve all the young adult’s knowledge concerning inadequate knowledge and it is improved by providing pamphlets and additional information booklet for better understanding in treating these water borne diseases.

**C. Section C: Existing level of knowledge score on water borne disease among young adults**

Table 2

Assessment of existing level of knowledge on water borne disease among young adults

Level of Knowledge	Mean	Standard Deviation
Inadequate knowledge	20.88	2.761
Moderate knowledge	8.627	2.352
Adequate knowledge	10.48	3.063

For the present study, the mean score on level of knowledge on water borne disease among young adults was 2.761 of standard deviation and 20.88 of mean on level of knowledge on water borne diseases.

**D. Section D: Association between the level of knowledge on water borne diseases with their selected demographic variables**

The findings suggested that there was a significant association between the level of knowledge with their selected demographic variables such as age of samples, gender, religion, education, occupation, marital status, types of family, dietary pattern.

**4. Conclusion**

Thus, the findings of the present study revealed that, the level of knowledge on water borne diseases among young adults was inadequate in knowledge and there is a need to improve the knowledge about water borne diseases through pamphlet distribution and create awareness by conducting health education programmers to eradicate open drainage systems and practices which helps to prevent water borne diseases.

**Acknowledgement**

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**Conflict of Interest**

Authors declare no conflict of interest.

**References**

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